

Figure 1

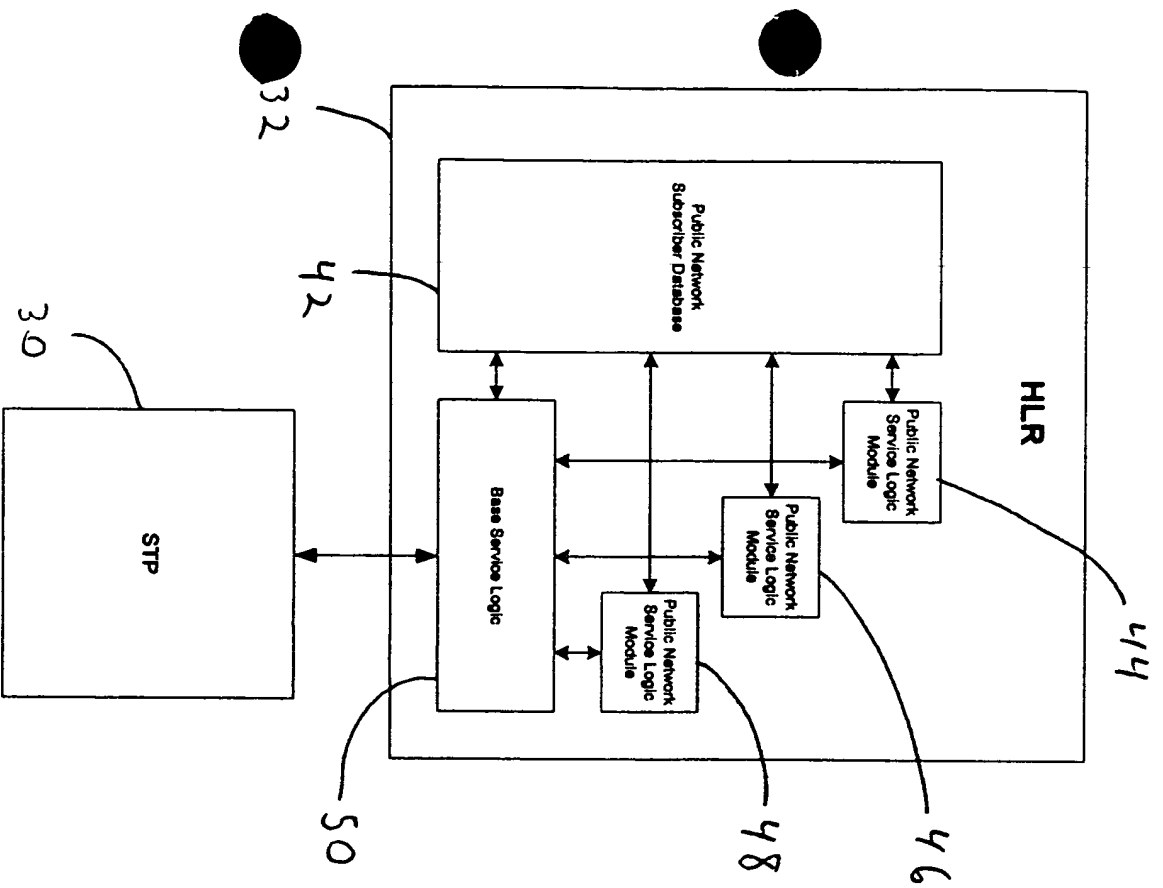


Figure 2

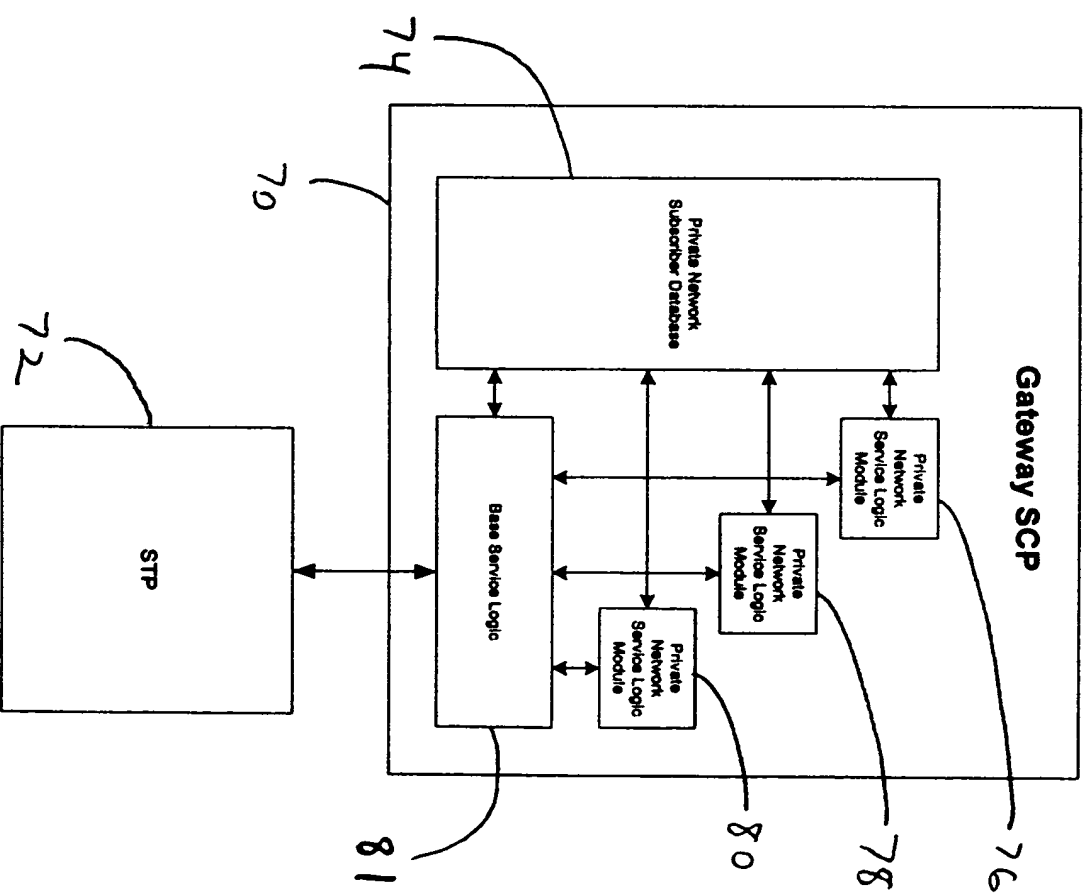


Figure 3

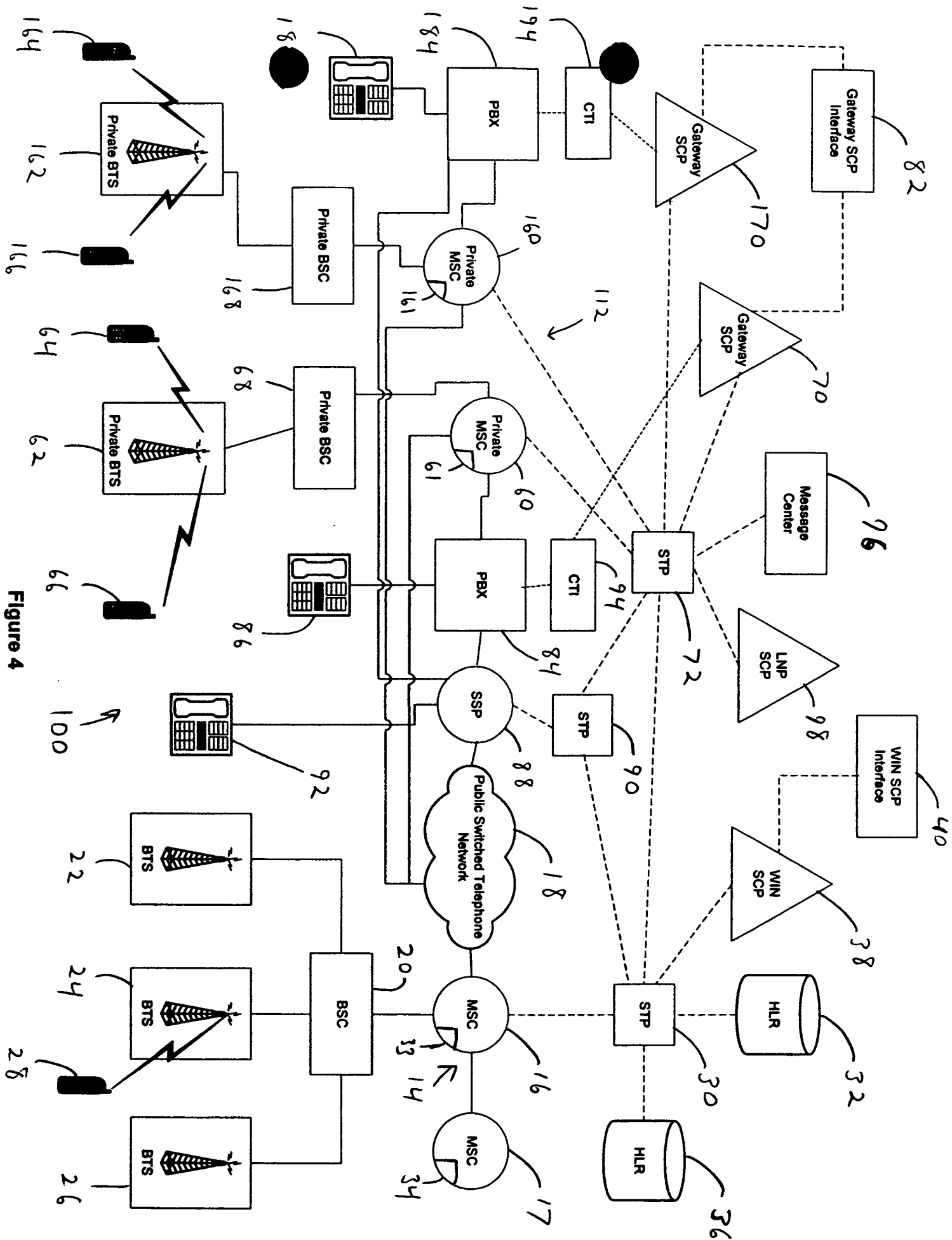


Figure 4

09393593 004300

Sequence diagram 400 illustrating the interaction between the Public Network and the Private Network during a handover process.

Participants:

- MSC 16 (Mobile Station Core)
- HLR 32 (Home Location Register)
- Gateway SCP 70 (Gateway Service Control Point)
- Private MSC 60 (Private Mobile Station Core)
- Handset 64 (Mobile Device)

Sequence of Events:

- Handset powers up** (400): The Handset 64 sends a message to the Private MSC 60.
- REGNOT** (402): The Private MSC 60 sends a message to the Gateway SCP 70.
- regnot rr** (406): The Gateway SCP 70 sends a message to the HLR 32.
- MSINACT** (412): The HLR 32 sends a message to the MSC 16.
- mainact rr** (418): The MSC 16 sends a message to the HLR 32.
- Handset powers off** (410): The Handset 64 sends a message to the Private MSC 60.
- MSINACT** (414): The Private MSC 60 sends a message to the Gateway SCP 70.
- mainact rr** (416): The Gateway SCP 70 sends a message to the HLR 32.

1. The first step is to identify the problem or question that needs to be addressed. This involves understanding the context and the specific requirements of the task.

While within Private Network, originate call to handset within Private Network

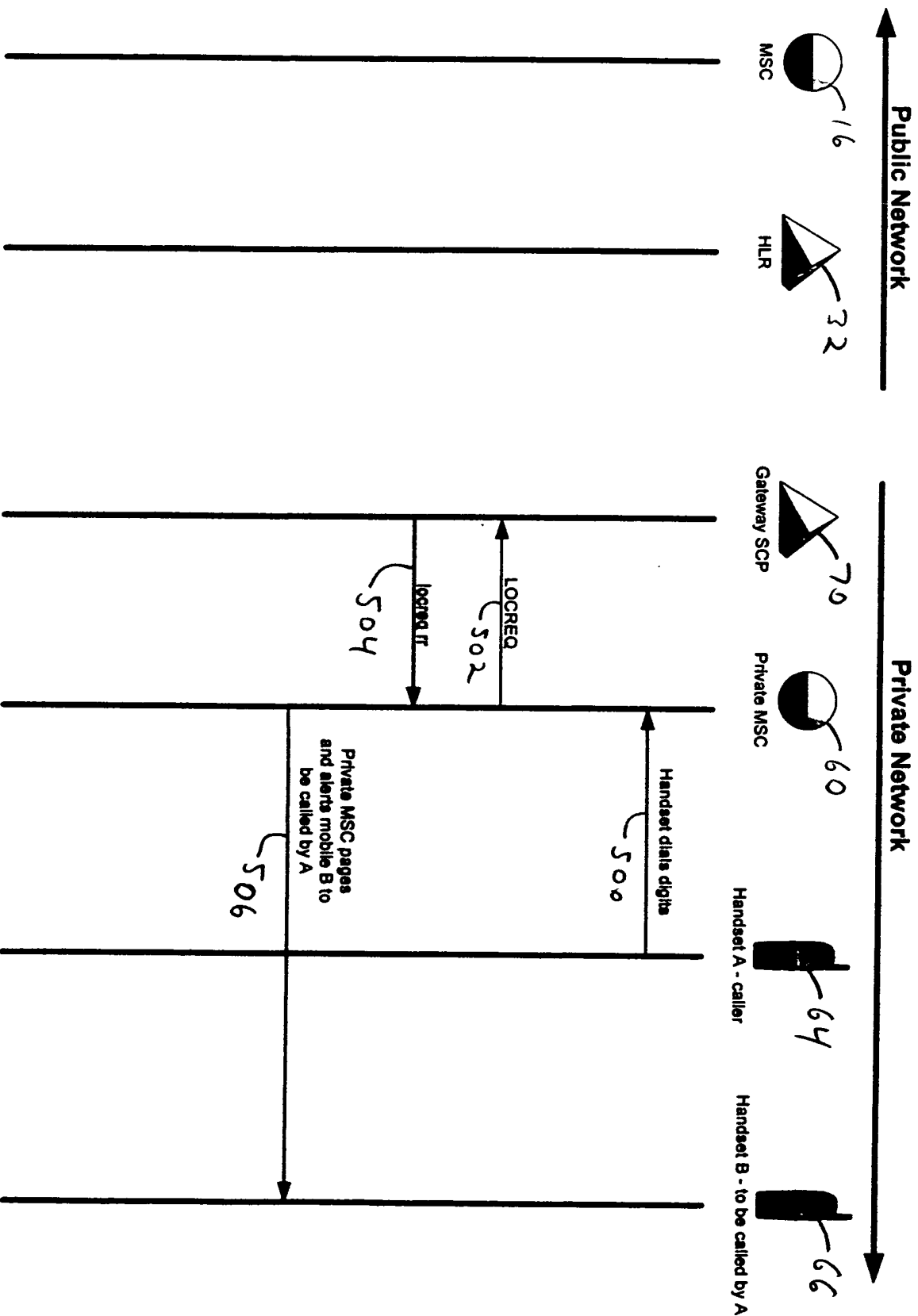


Figure 8

While within Private Network, a handset on one Private MSC originating a call to another handset on another Private MSC

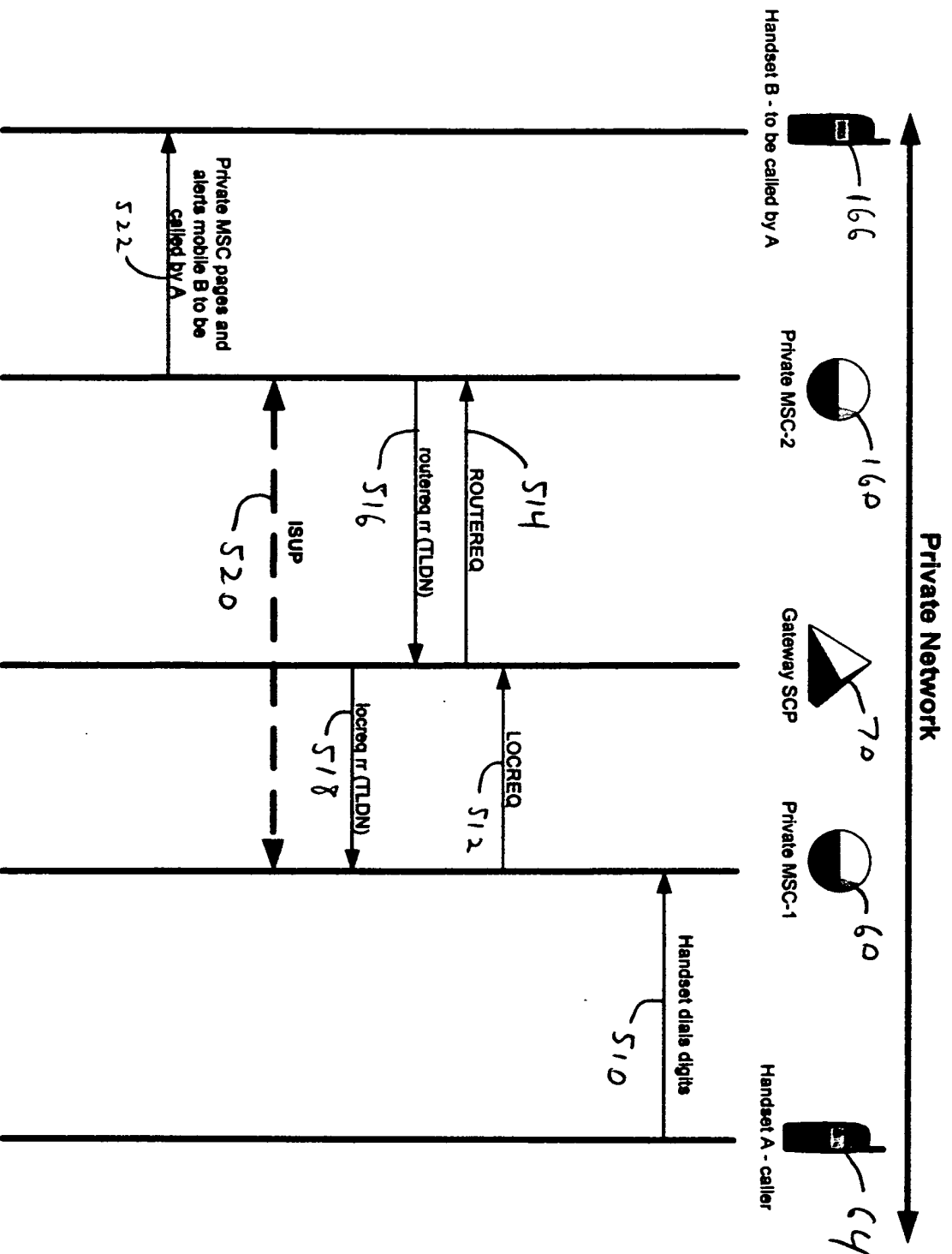


Figure 9

09999999 004500

While within Private Network, originate call to handset in Public Network

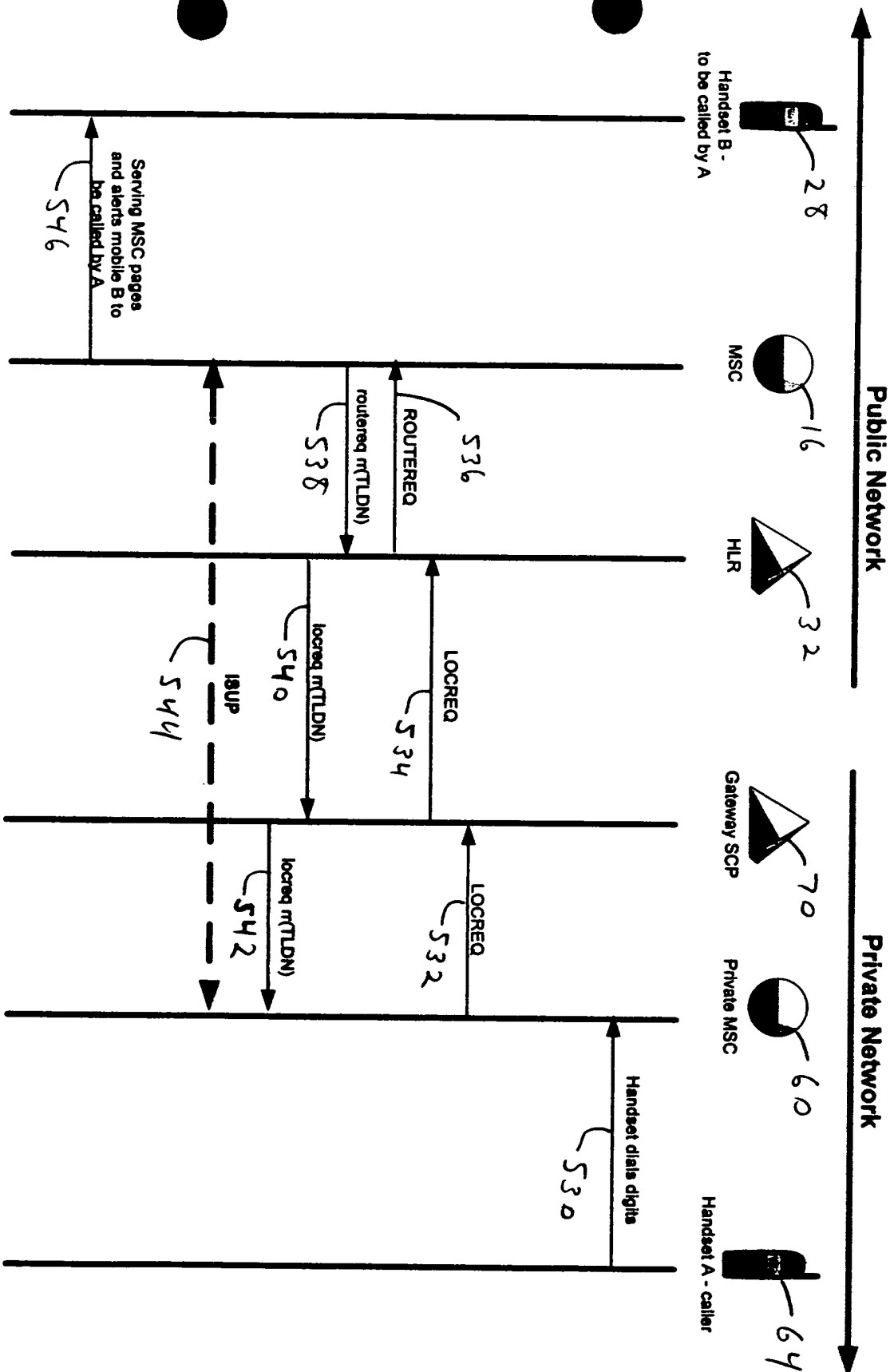


Figure 10

Incoming PSTN call to a handset while the handset is within Private Network

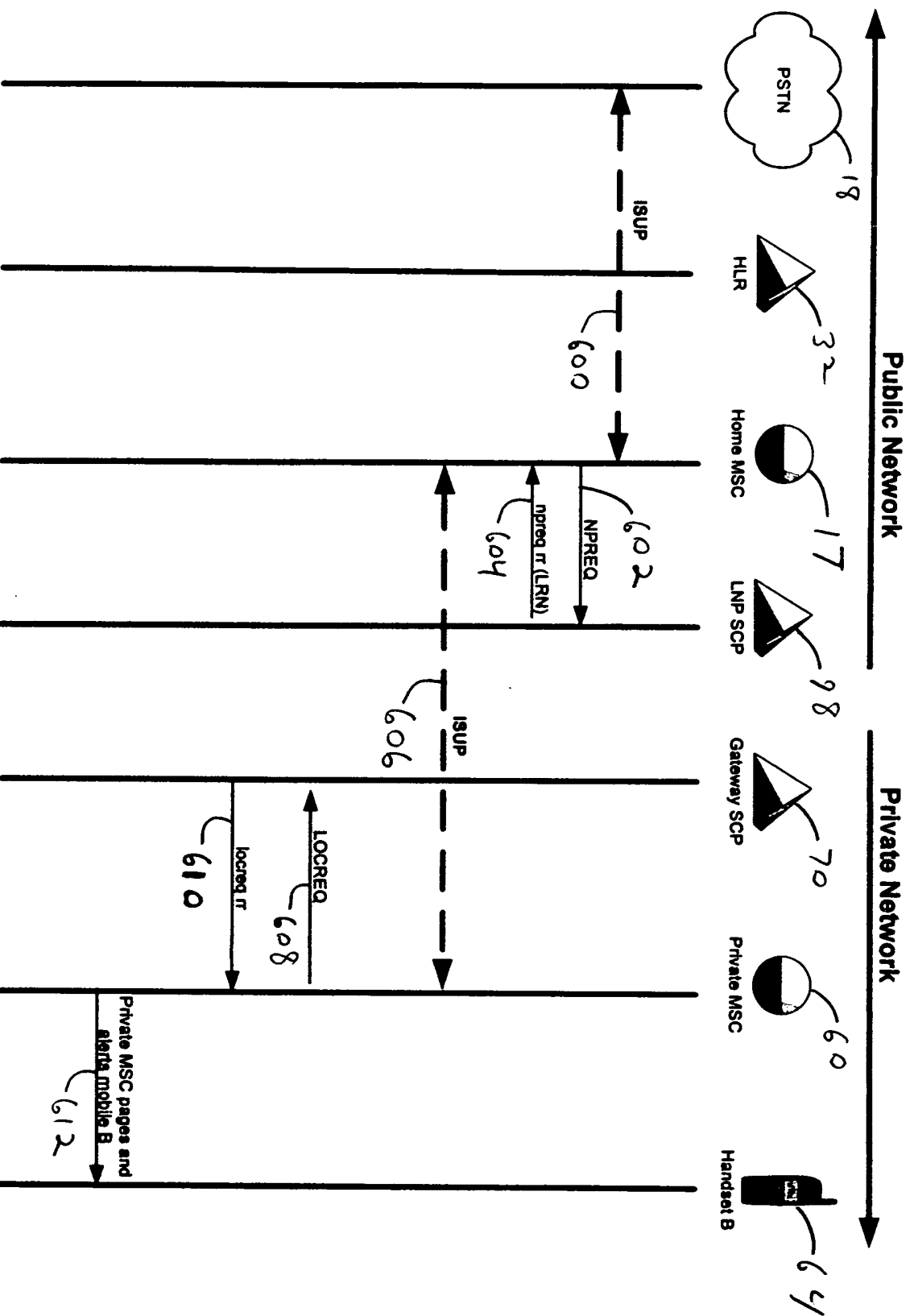


Figure 11

Incoming PSTN call to a handset while the handset is within the Public Network

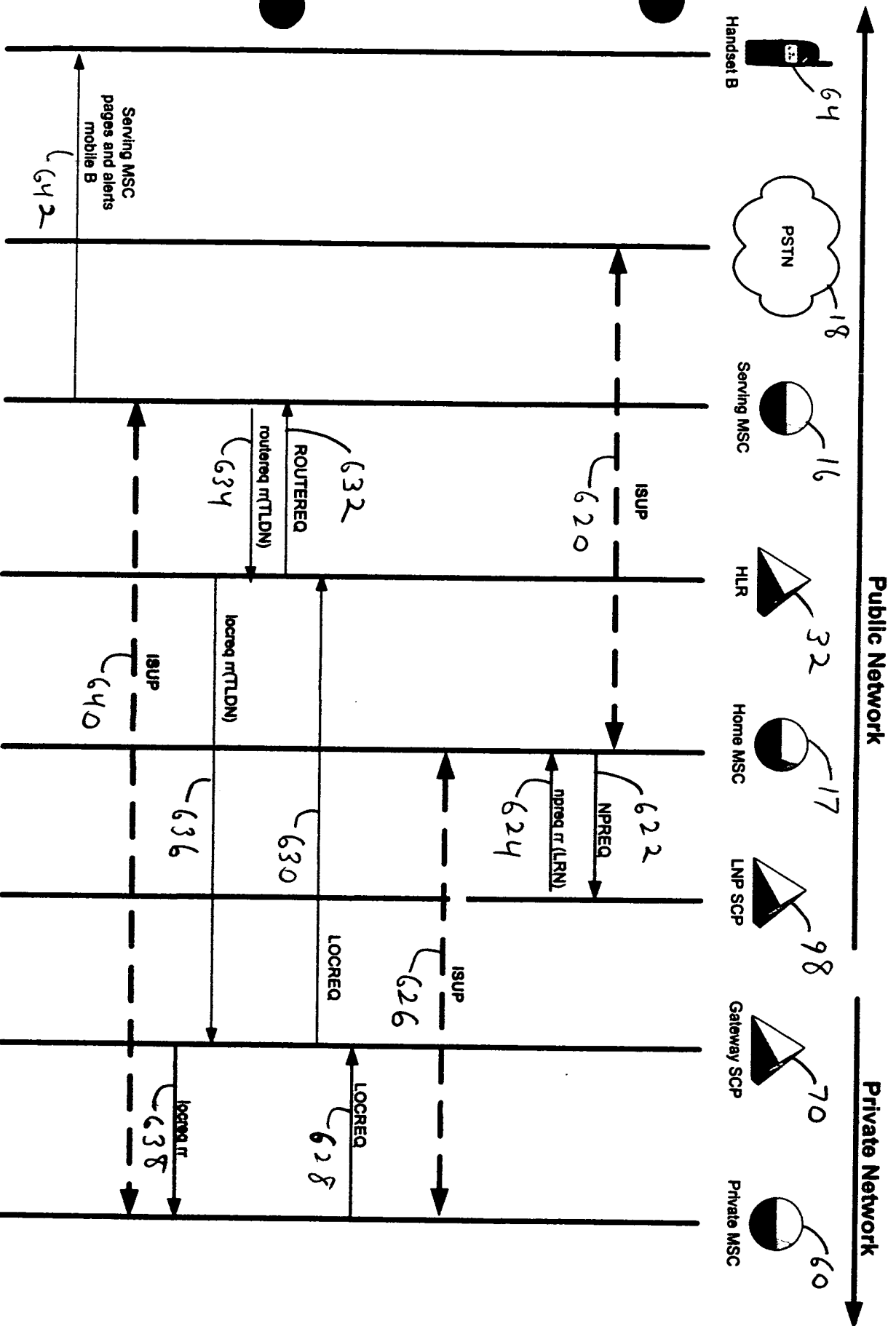


Figure 12

09593939 004500

Handset A - calls B

Handset B - to be called by A

Public Network

Private Network

MSC 16

HLR 32

WIN SCP 38

Gateway SCP 70

Private MSC 60

Handset A - calls B 64

Handset B - to be called by A 28

Handset dials digits 700

ORREQ 702

ORREQ IT 708

LOCREQ 710

LOCREQ IT 718

ROUTERREQ 714

ROUTERREQ IT 716

ISUP 722

Serving MSC pages and alerts mobile B 724

Figure 13

Call Origination Services While in Public Network

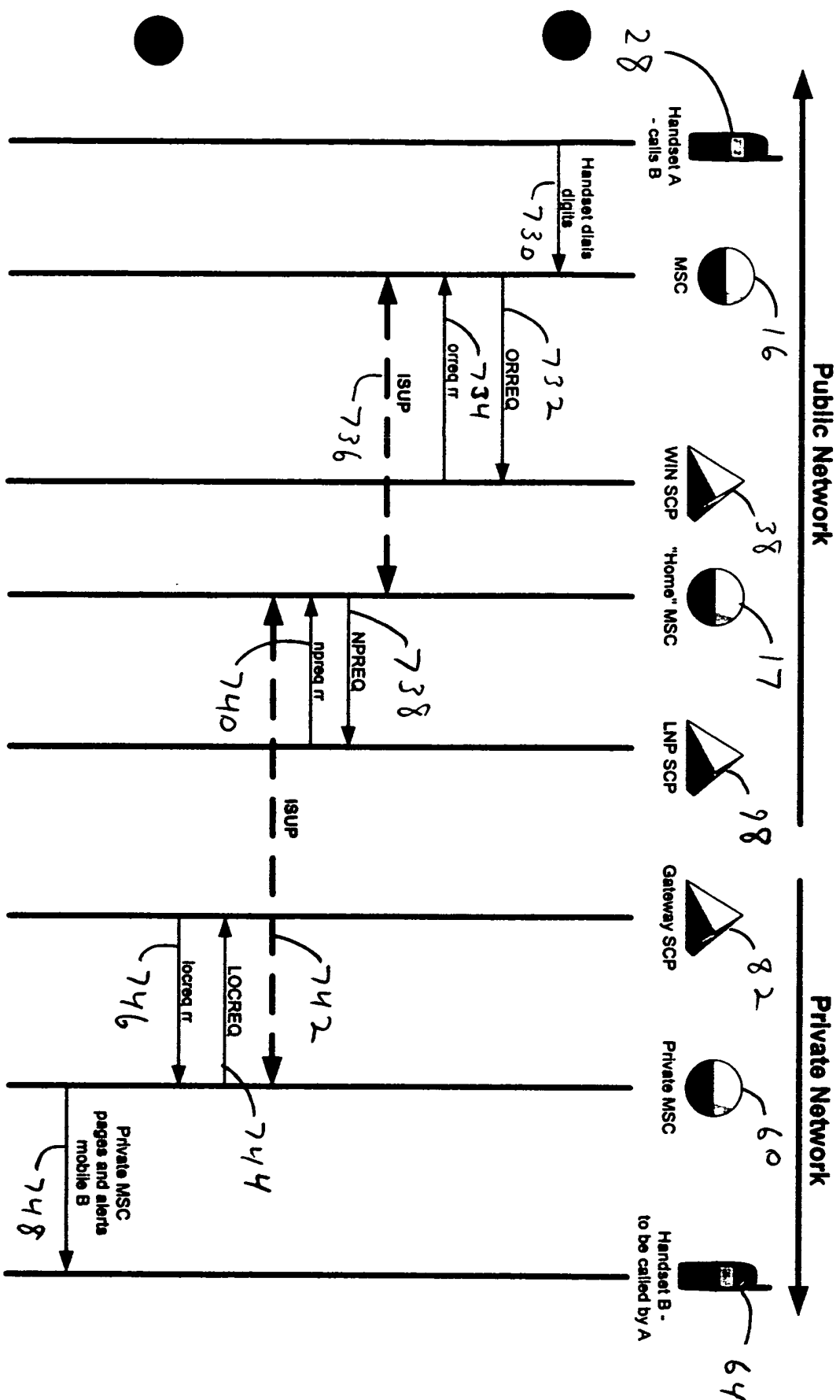


Figure 14

Call Termination Services While in Private Network

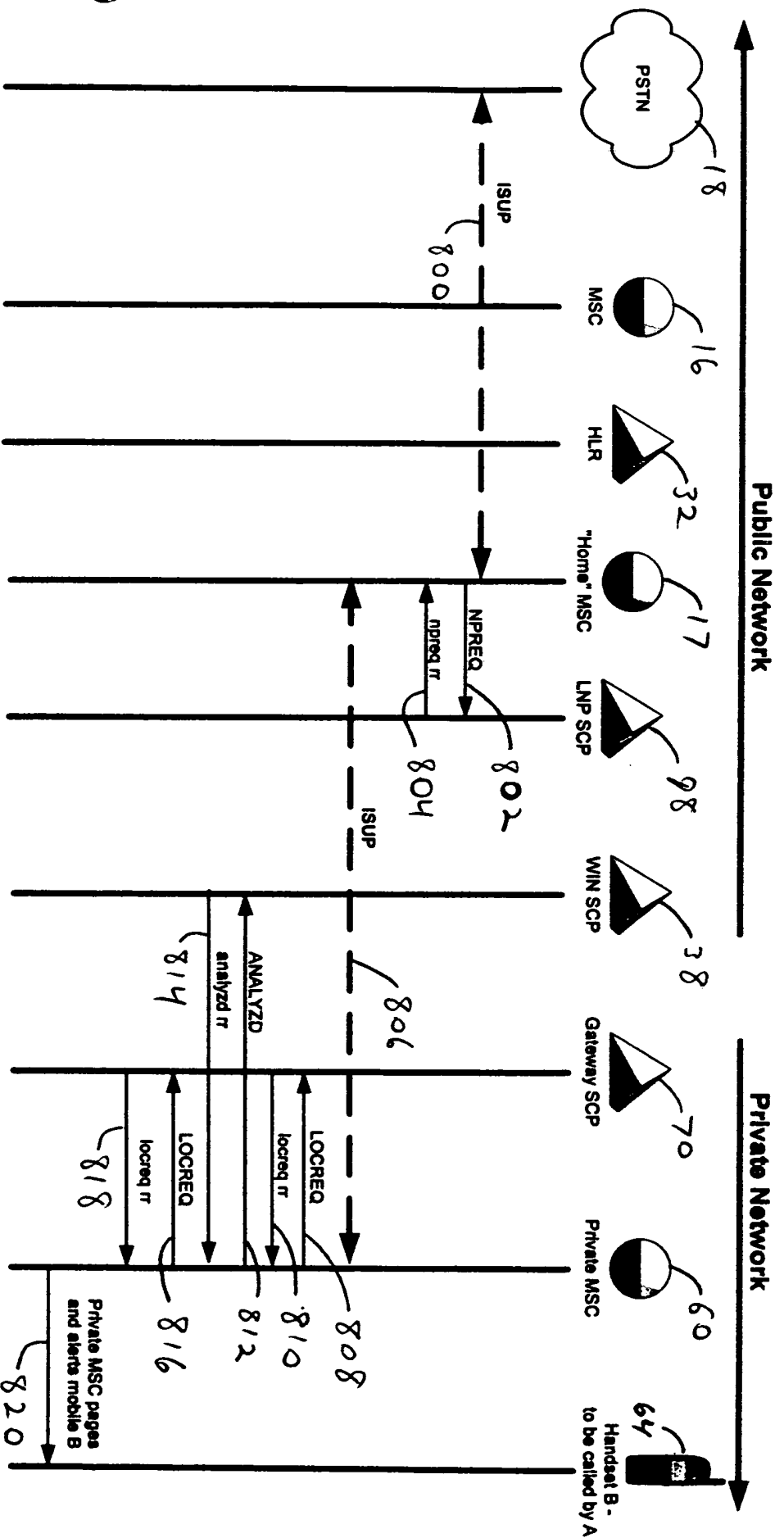


Figure 15

Call Termination Services While in Public Network

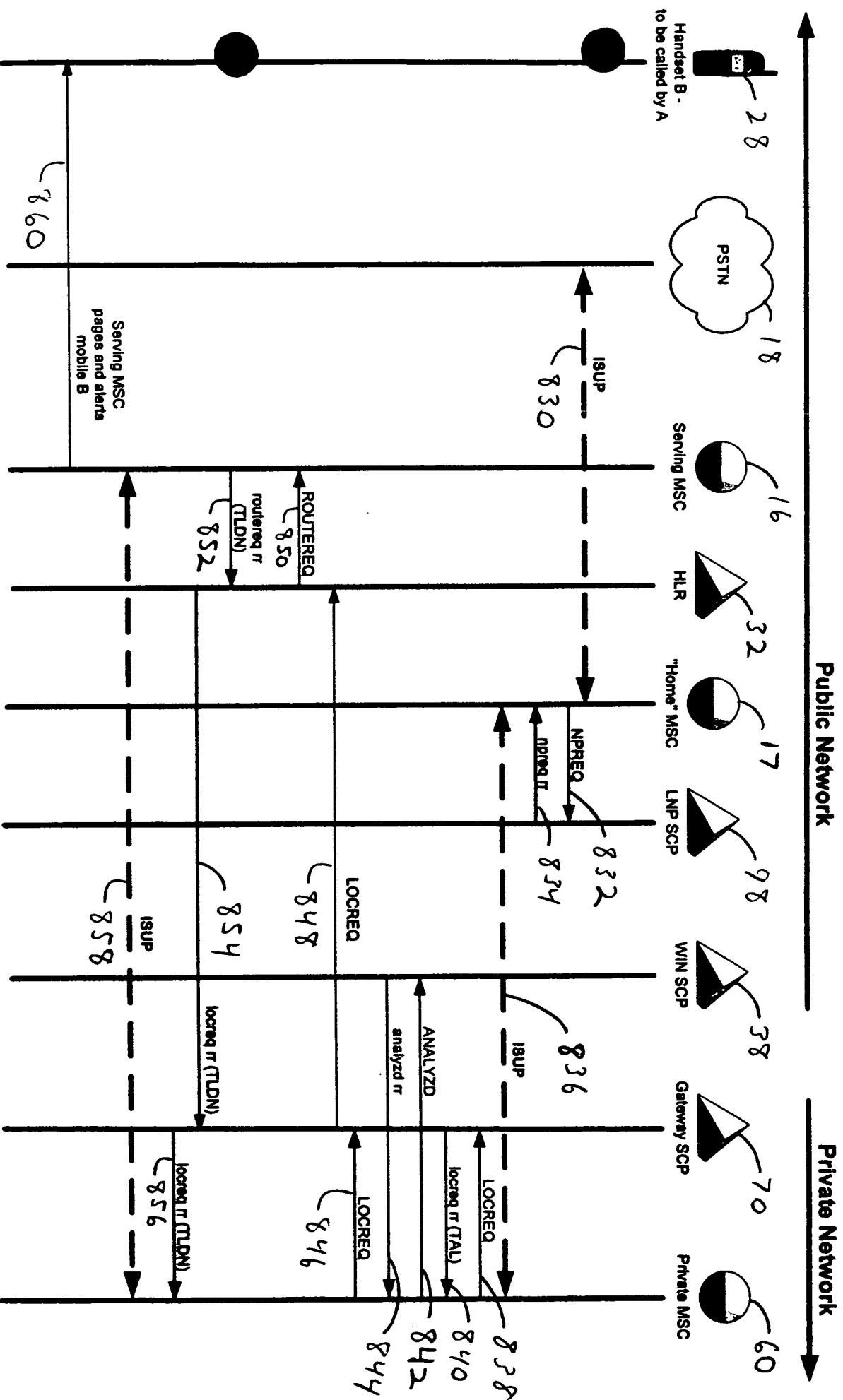


Figure 16

While within Private Network, Feature Code Update Performed

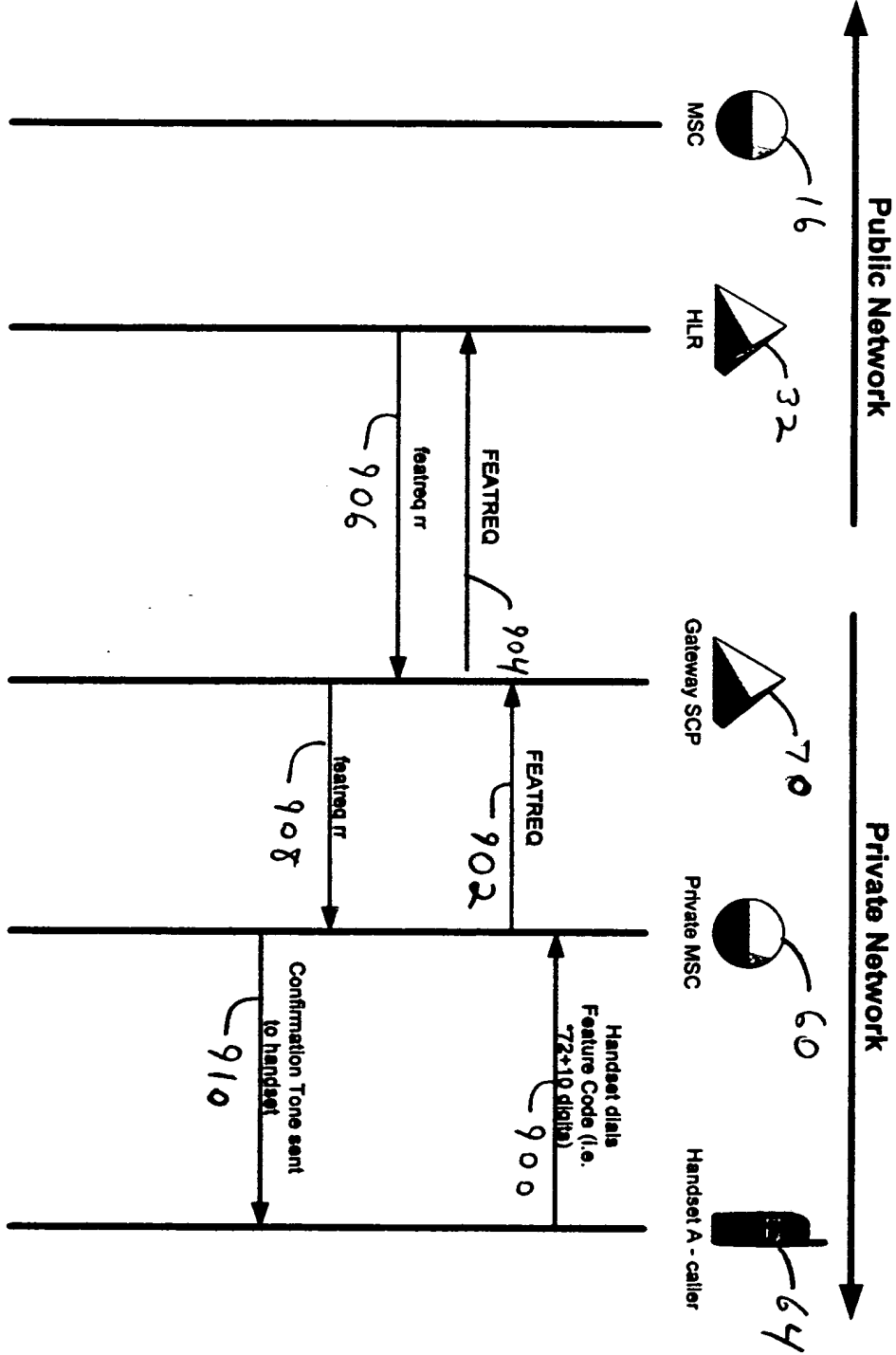


Figure 17

While within Public Network, Feature Code Update Performed

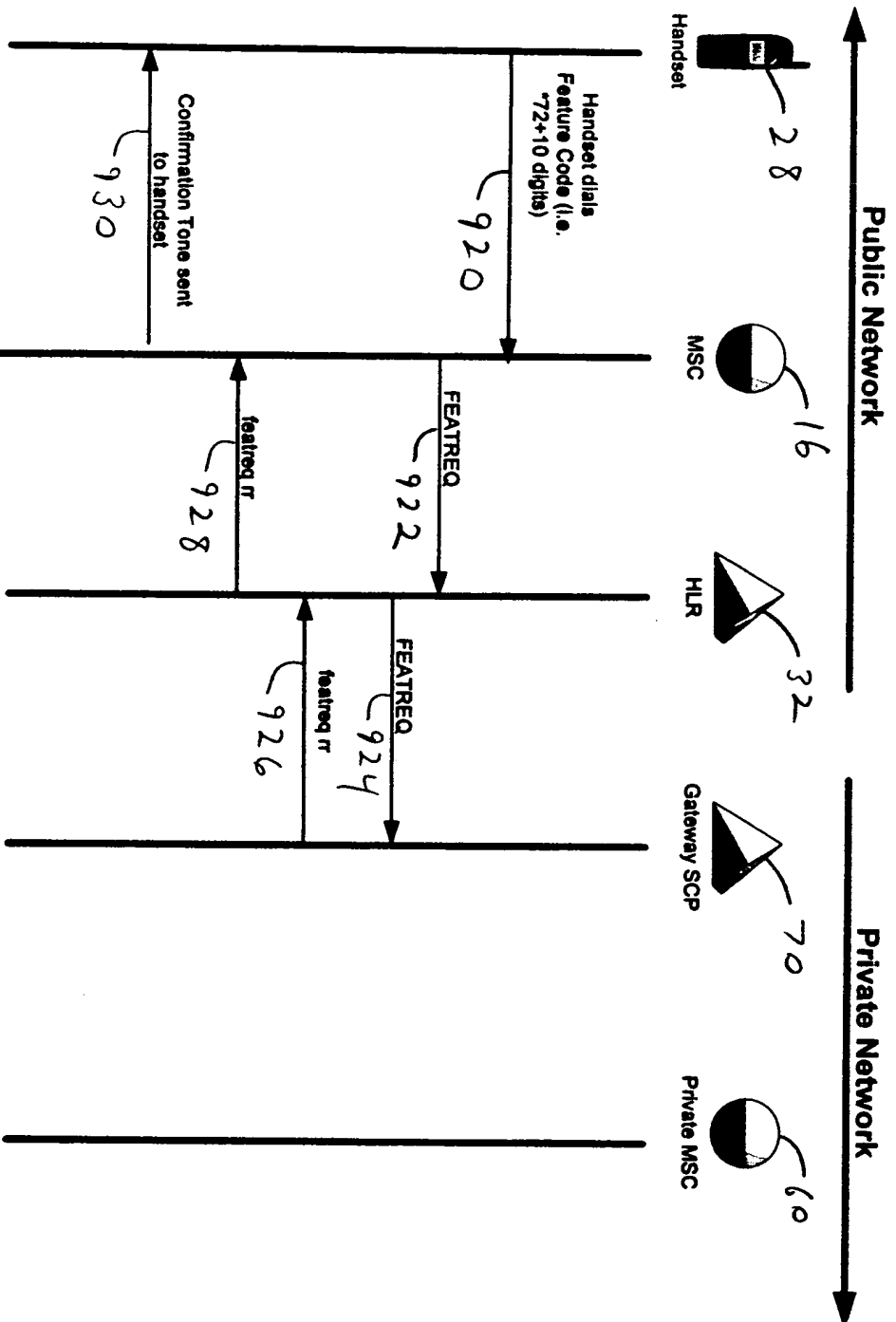


Figure 18

Inter-System Hand-off from Private Network to Public Network

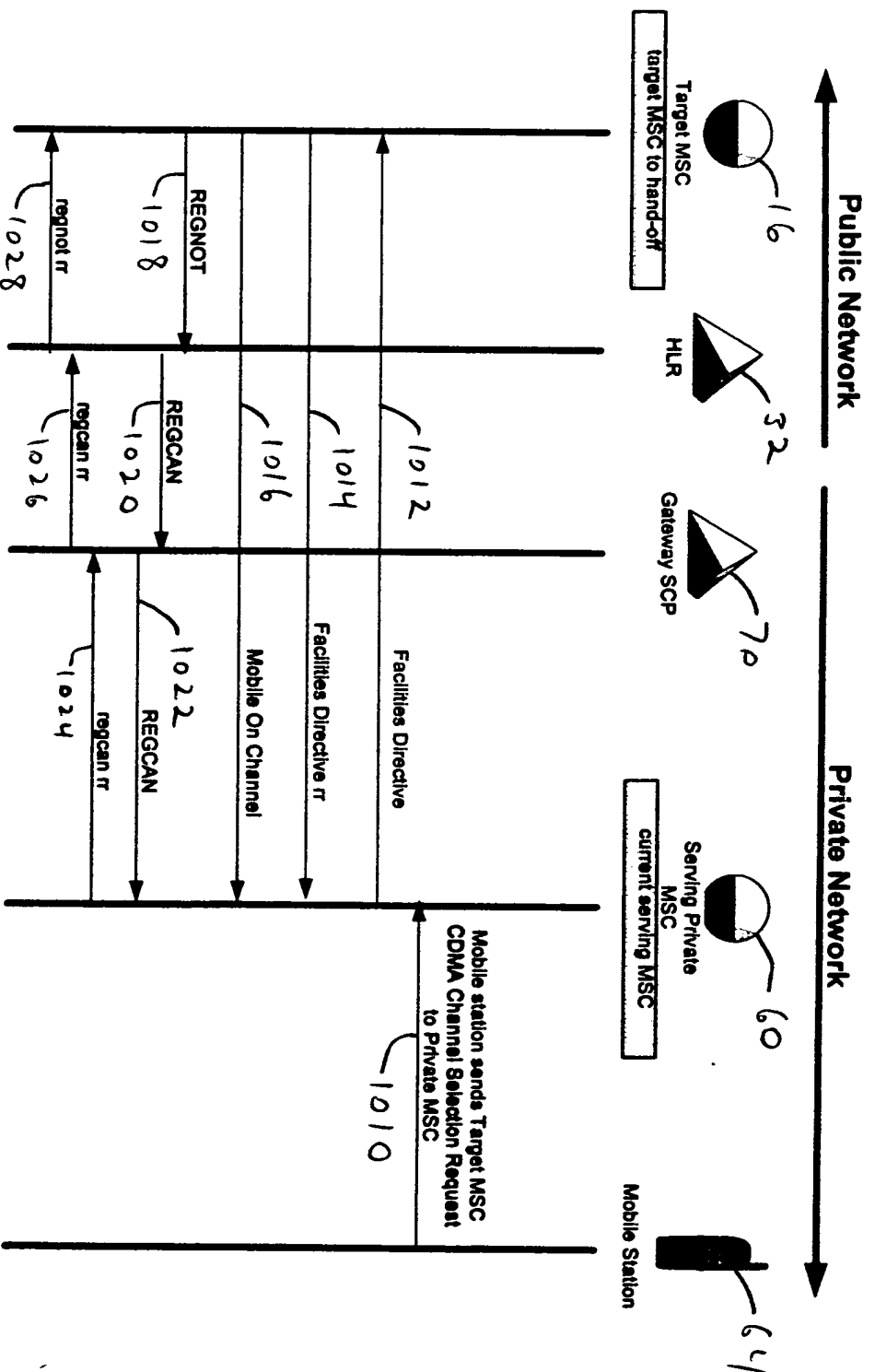


Figure 20

Inter-System Hand-off from Public Network to Private Network

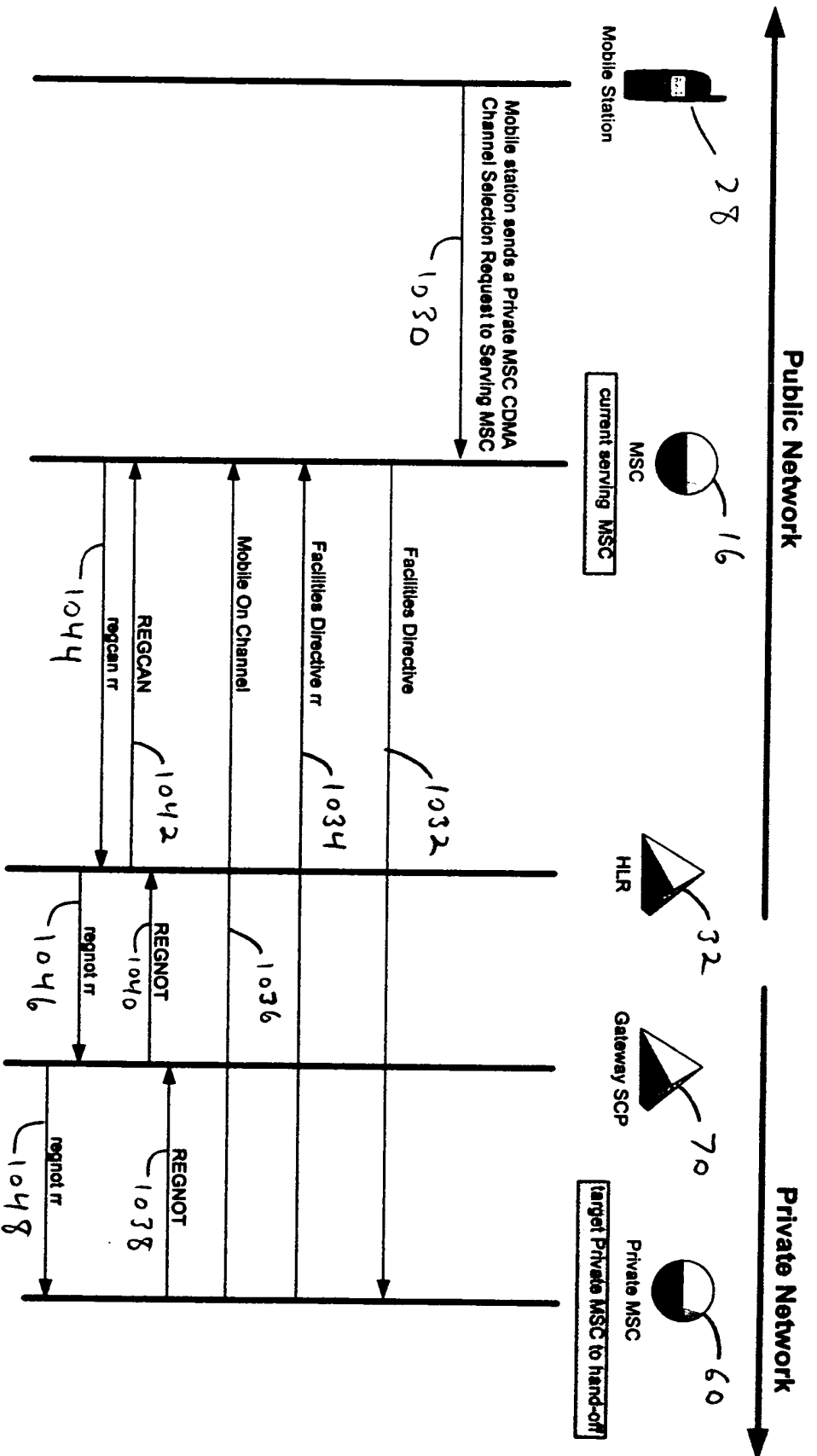


Figure 21

Inter-System Hand-off from One Private MSC to Another Private MSC
within the Private Network

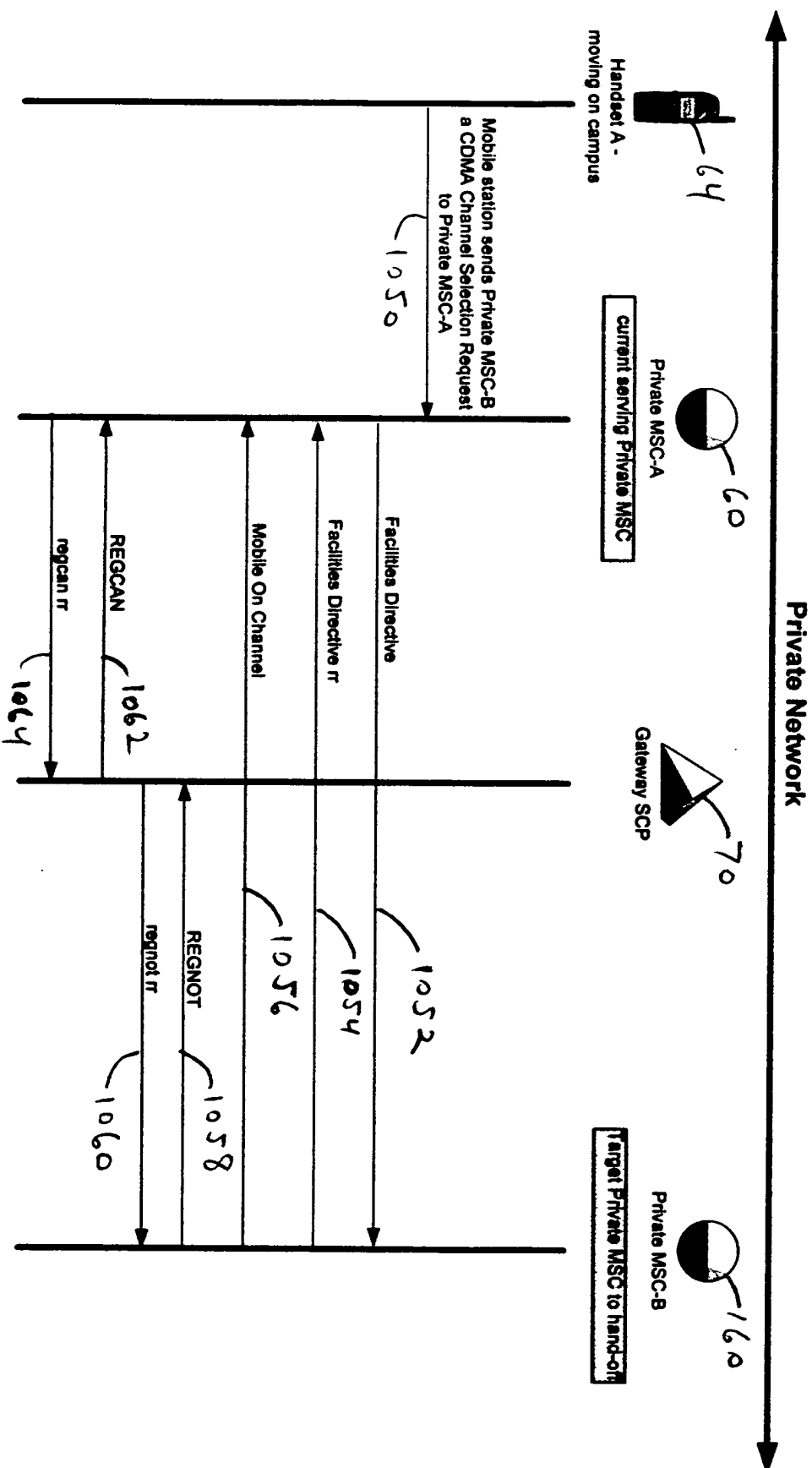


Figure 22

Short Message Delivery to Private MSC while in Private Network and active

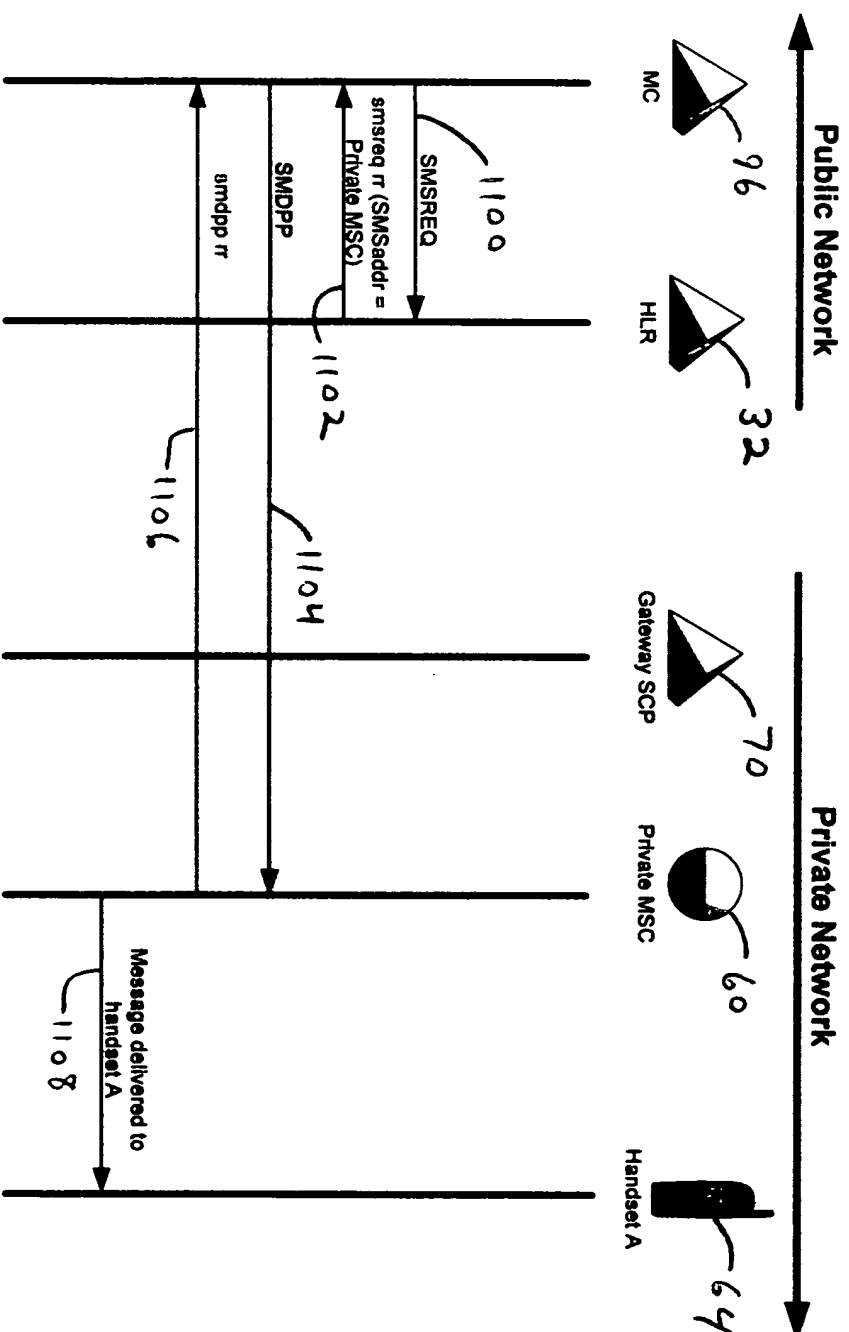


Figure 23

Short Message Delivery to Mobile Station first inactive, and then active, in Private Network

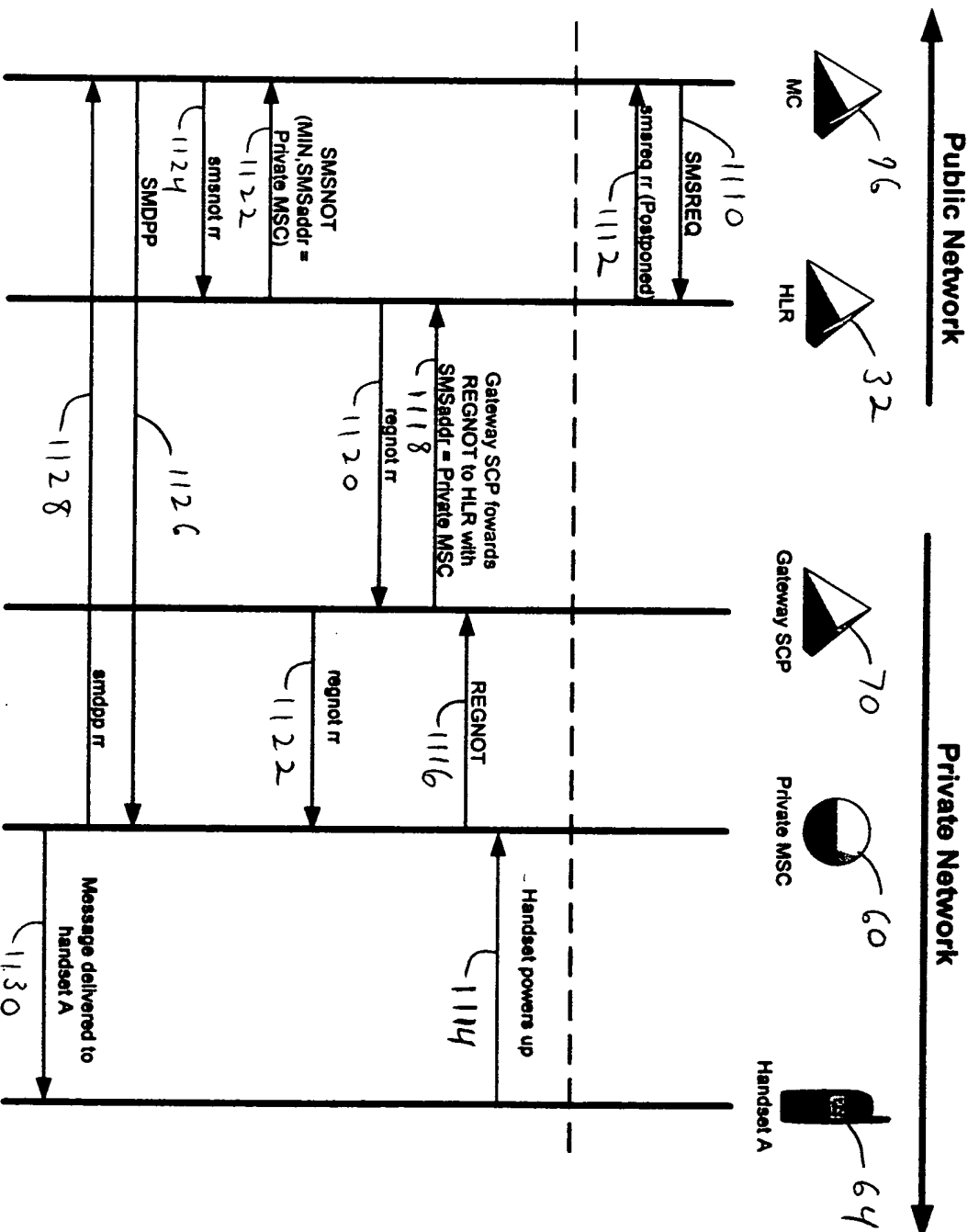
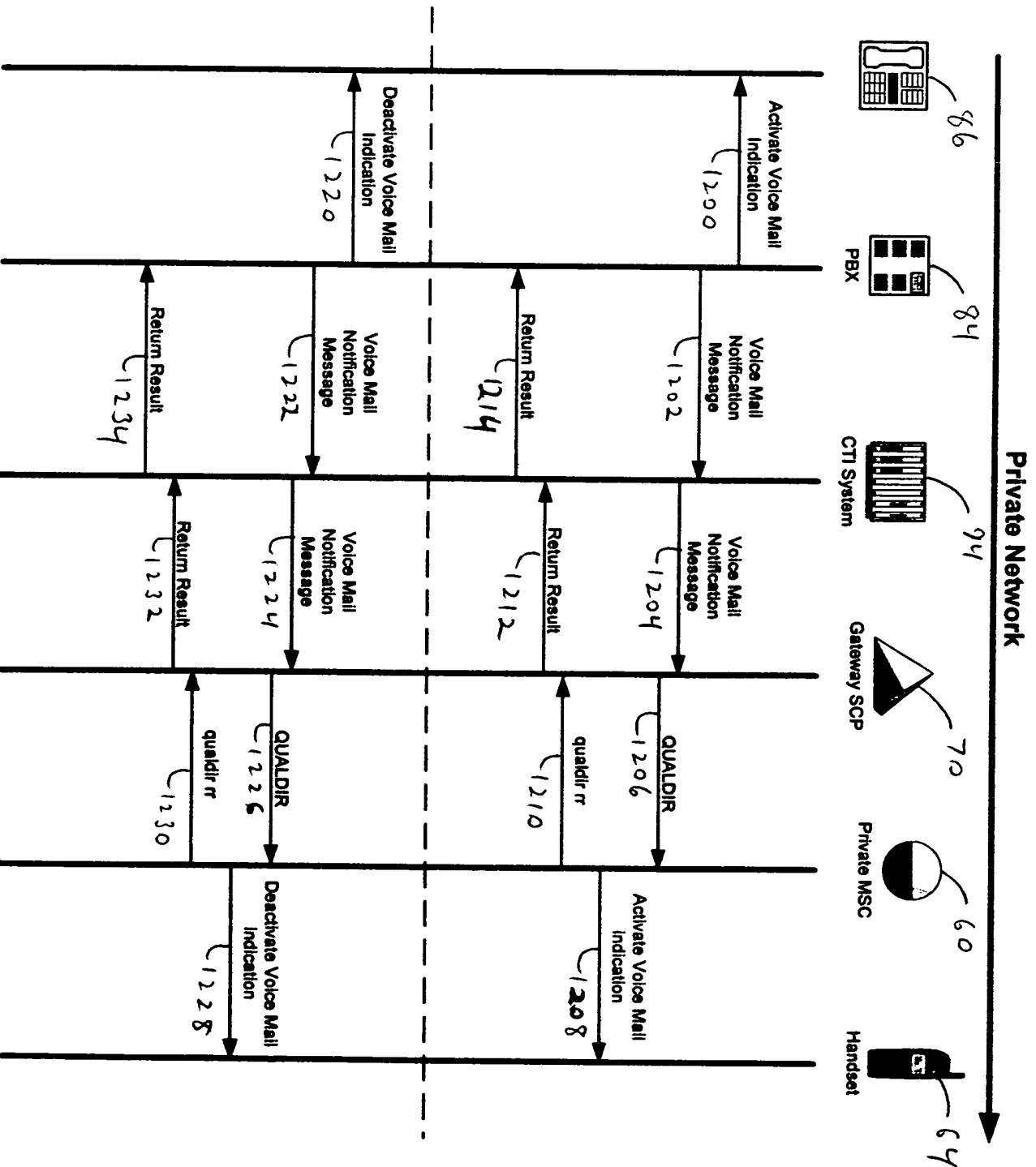


Figure 24

Private Network PBX Voice Mail Notification while in Private Network



Private Network PBX Voice Mail Notification while in Public Network

